Message

From: Schmidt, Michelle [Michelle.Schmidt@tetratech.com]

Sent: 11/8/2018 7:42:58 PM

To: Hodgkiss, Miranda [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=9d441ddb44ac4ed486058d2c2690b977-Hodgkiss, Miranda]

Subject: RE: Deschutes - Data Requests

Flag: Follow up

Thanks Miranda.

Michelle Schmidt | Environmental Engineer

Direct: 919.485.2081 | Main: 919.485.8278 | Fax: 919.485.8280

michelle.schmidt@tetratech.com

Tetra Tech | Complex World, Clear Solutions

P.O. Box 14409 | 1 Park Drive, Suite 200, Research Triangle Park, NC 27709 | www.tetratech.com

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From: Hodgkiss, Miranda < Hodgkiss. Miranda@epa.gov>

Sent: Thursday, November 08, 2018 2:42 PM

To: Schmidt, Michelle < Michelle. Schmidt@tetratech.com>

Cc: Rafi, Teresa <teresa.rafi@tetratech.com>; Butcher, Jon <Jon.Butcher@tetratech.com>

Subject: RE: Deschutes - Data Requests

Hi Michelle,

In answer to your two questions:

- 1. I assume you are referring to the parts of Moxlie that flow through culverts and pipes? The surface water quality standards are applicable to those parts of the creek. There are no other regulatory requirements that I am aware of relating to the development of TMDLs in these situations. I think our approach should be to apply the WQS to the whole reach, and develop a loading capacity as we would normally do.
- 2. Your approach for determining the most representative data sounds good to me, as we don't have a standard approach and typically evaluate things on a case by case basis.

From: Schmidt, Michelle < Michelle. Schmidt@tetratech.com>

Sent: Wednesday, November 7, 2018 1:36 PM

To: Hodgkiss, Miranda < Hodgkiss. Miranda@epa.gov>

Cc: Teresa Rafi <teresa.rafi@tetratech.com>; Jon Butcher <jon.butcher@tetratech.com>

Subject: RE: Deschutes - Data Requests

Miranda,

The versions of the model listed under #4 were used for model calibration and validation. The request #5 refers to the versions of the model used to simulate management scenarios (e.g., those shown in Figure 55 in the June 2012 Technical Report #12-03-008). It is preferable if Ecology can provide both.

I've been reviewing monitoring data for the TMDL update and this review raised a few questions:

- 1. Portions of impaired creeks are buried (e.g., a majority of Moxlie Creek that is impaired for bacteria is buried). Are the surface water quality standards applicable to buried creeks? Are there other regulatory requirements or information important to note for development of TMDLs for partially buried waterbodies?
- 2. Black Lake Ditch and Lake Lawrence Creek are directly fed by lakes and impaired for DO (Black Lake Ditch is also impaired for pH). Monitoring data has been collected at the lake outlets (i.e., upstream ends of the impaired segments) and further downstream on the impaired segments. We plan to compare the upstream and downstream conditions at both sites, and we will use this analysis to determine what data is most representative of the waterbody and informative for the TMDL (potentially aggregating all sites along the segment). Does EPA have a standard approach for determining the inclusion or exclusion of data collected at the upstream end of an impaired segment for TMDL development?

Thanks,

Michelle

Michelle Schmidt | Environmental Engineer

Direct: 919.485.2081 | Main: 919.485.8278 | Fax: 919.485.8280

michelle.schmidt@tetratech.com

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From: Hodgkiss, Miranda < Hodgkiss. Miranda@epa.gov>

Sent: Wednesday, November 07, 2018 4:01 PM

To: Schmidt, Michelle < Michelle. Schmidt@tetratech.com >

Cc: Rafi, Teresa < teresa.rafi@tetratech.com>; Butcher, Jon < Jon.Butcher@tetratech.com>

Subject: RE: Deschutes - Data Requests

Hi Michelle -

One clarifying question from Ecology - if they can locate the other modeled scenarios detailed in #4, would that take care of #5?

From: Hodgkiss, Miranda

Sent: Monday, November 5, 2018 2:31 PM

To: 'Schmidt, Michelle' < Michelle. Schmidt@tetratech.com >

Cc: Amy King <amy.king@tetratech.com>; Teresa Rafi <teresa.rafi@tetratech.com>; Jon Butcher

<ion.butcher@tetratech.com>

Subject: RE: Deschutes - Data Requests

Thanks, Michelle. I've sent your requests to Ecology, and will let you know what they say.

From: Schmidt, Michelle < Michelle. Schmidt@tetratech.com >

Sent: Monday, November 5, 2018 12:50 PM

To: Hodgkiss, Miranda < Hodgkiss. Miranda@epa.gov>

Cc: Amy King <amy.king@tetratech.com>; Teresa Rafi <teresa.rafi@tetratech.com>; Jon Butcher

<ion.butcher@tetratech.com>

Subject: Deschutes - Data Requests

Miranda,

I've reviewed the files provided by Ecology and have the following requests/comments:

- 1. Information from the following studies is applied in the TMDL technical analyses for fine sediment:
 - a. Konovsky, J. and J. Puhn. 2005. Trends in Spawning Gravel Fine Sediment Levels—Deschutes River, Washington. Squaxin Island Tribe, Shelton, Washington.
 - b. Collins, B. 1994. A study of rates and factors influencing channel erosion along the Deschutes River, Washington, with application to watershed management planning. Report prepared for Squaxin Island Tribe Natural Resources Department, Shelton, WA. 103 p. + appendices.

It would be helpful if you could request these studies from the Squaxin Tribe or Ecology.

- 2. Ecology provided the report for the Washington Surface Erosion Model (WARSEM) used to quantify sediment loads from unpaved roads. However, we did not receive a copy of the model.
- 3. We also requested the DO delta method model for the Deschutes River and didn't receive it.
- 4. Ecology provided QUAL2kw models for 8/11/2004. Models were also developed for July 21-27, 2004 and July 27-August 2, 2003 (and results are also shown for August 5-11 & 20, 2003 in the report). Is Ecology able to provide those model versions as well?
- 5. Ecology sent output from the QUAL2kw scenario runs. However, we are missing scenario versions of the model.

Our primary shade modeler is out of the office today, but we will review the shade model files soon and let you know if components are missing.

Thanks,

Michelle

Michelle Schmidt | Environmental Engineer
Direct: 919.485.2081 | Main: 919.485.8278 | Fax: 919.485.8280
michelle.schmidt@tetratech.com

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